

September 14 - September 20, 2001

The Terra spacecraft is in nominal mode. All instruments are in nominal science mode.

Instrument operations are continuing smoothly on all five instruments. Instrument Operations Teams have responded to the information on the November 18 Leonid meteor shower. The Terra instruments will remain in normal operating mode for the duration of this event. The overall Terra plan for Leonid operations was completed on September 20.

The report on the MOPITT cooler anomaly in May is being reviewed at Goddard Space Flight Center. A report on the Chopper 3 anomaly is anticipated. The MOPITT instrument continues to operate well on one cooler with Chopper 3 remaining in the same position in which it was left at the time of the anomaly, which appears to have resulted from a blown fuse. No disturbances in the chopper position have been seen in association with the MODIS calibration roll maneuvers or the Drag Make-up Maneuver conducted on September 13. Rolls about the spacecraft X-axis (like for the MODIS calibrations) are of the most concern with regard to effects on the MOPITT chopper. Propulsive maneuvers in the direction of the X-axis or rotations about the Y-axis (as for the proposed Deep Space Calibration Maneuver) are believed to be of little consequence. Values for the acceleration and rates of motion for all of these maneuvers have been provided to the MOPITT team for analysis of the potential effect on the chopper.

On September 19, there was a negative acquisition with Tracking and Data Relay Satellite (TDRS) Spare. An emergency contact was scheduled to verify health and safety. Analysis showed that the spacecraft indeed appeared to be locked onto the TDRS during the negative acquisition. The Terra Flight Operations Team is working with White Sands to assess User Performance Data to diagnose the problem. The investigation is ongoing. A total of 2,084,010 CADUs were lost as a result of the negative acquisition, including 886,891 CADUs of MISR data and 1,197,119 CADUs of MODIS data.

Terra Plans:

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- Next Drag Make-up Maneuver on October 3
- Next MODIS Calibration Roll Maneuver on October 7
- Planning and Simulations in progress for Terra Inclination Adjust Maneuver
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